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EUPLEURODON PERUVIANUS (RATHBUN, 1923); A SPECIES OF CRAB NEWLY RECORDED FROM CHILE (CRUSTACEA: DECAPODA: BRACHYURA)

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Abstract.—Five specimens of the rarely collected crab *Eupleurodon peruvianus* were collected near Iquique, Chile (20°12'S, 70°10'W), during winter, 1977 and 1978. Two of them were found in the stomach contents of the labrid fish, *Pimelometopon maculatus*; the other three specimens were collected from the red alga, *Corallina officinalis chilensis,* in the rocky intertidal zone. These records represent an extension of the known latitudinal range of this crab which now reaches from Salinas, Ecuador, to Iquique, Chile, and adds a genus and species to the 15 species of Majidae recorded from Chilean waters.

Brachyuran decapods of the genus *Eupleurodon* Stimpson, 1871, are small crabs, which have been collected only from the intertidal zone of the Eastern Pacific. They have a carapace with depressed surface, its anterolateral angles being remarkably prominent, tooth-shaped, and projected forward subparallel to the body axis; the abdomen has only 5 free segments in both sexes and the ambulatory appendages are strongly prehensile, provided with crenate articles. The genus is closely related to *Epialtus*. There are three species of *Eupleurodon*: *E. trifurcatus* Stimpson, extending from Cape San Lucas, Baja California, Mexico (Garth 1958) to Chimbote, Perú (Chirichigno 1970); *E. rathbunae* Garth, 1958, collected only on Hood Island, Galapagos Archipelago and *E. peruvianus* (Rathbun) whose distribution ranges from Salinas, Ecuador to Iquique, Chile. The latter species was transferred from *Epialtus* (see Rathbun 1923, 1924) to *Eupleurodon* by Garth (1958) who stated that the differences used to distinguish the two forms as different species were sexual, with *Eupleurodon peruvianus* being the female and *Epialtus peruvianus* the male of the same species, *Eupleurodon peruvianus*.

Material.—A male and 4 females of *Eupleurodon peruvianus* were examined (Table 1): the male (MNHN D-10858) and an ovigerous female (MNHN D-10859) were captured by Prof. Raúl Soto M., in the rocky intertidal zone of Iquique in samples of *Corallina officinalis chilensis* during winter, 1977. The other 3 females were collected by Lic. Héctor R. Fuentes in Jun–Jul 1978 in the vicinity of Huaiquique beach: an ovigerous female (MNHN D-10860) obtained from intertidal seaweed samples; and two others, found in stomach contents of a labrid fish, *Pimelometopon maculatus* Pérez, captured between 3 and 20 m depth (Fuentes 1978).

Diagnosis.—(Modified from Garth 1958:243). Male: Hepatic width surpassing branchial width; rostrum elongate and bilobed; orbital arch making an obtuse angle with rostral border. First pleopod concave, with a thumb-shaped process, and opposed horny pointed tip.

Female: branchial width surpassing hepatic width; rostrum short, its point

Table 1.—Morphometric data of *Eupleurodon peruvianus* (Rathbun, 1923). Measurements in (mm).

	Sex				
	Males		Females		
Catalogue number	#	MNHN D-10858	#	MNHN D-10859	MNHN D-10860
Carapace length	9.50	12.49	7.30	8.84	(rostrum fractured)
Carapace length to rostral base	—	8.69	—	7.59	7.90
Hepatic width	6.45	7.74	5.25	7.19	7.10
Branchial width	6.45	8.64	5.45	7.49	7.26
Rostral length	2.70	3.78	1.80	1.62	—
Rostral width	1.50	1.82	1.00	1.43	1.63
Chela length	3.40	—	1.70	(r) 2.52	(r) 2.70
Chela height	—	—	—	1.13	1.08
Chela dactylus length	1.60	—	1.00	1.25	1.50
Abdomen length (folded)	—	4.08	—	5.90	6.30
Abdomen width	—	2.56	—	7.22	7.05
Length second leg	8.50	—	—	8.41	8.23
third leg	—	7.57	—	7.70	4.59
fourth leg	—	8.56	—	6.07	6.20
fifth leg	4.50	—	—	5.85	4.71

= Taken from Garth (1958).
MNHN-D = Museo Nacional de Historia Natural, Chile; colección de Crustáceos Decápodos.
r = right.

divided; prominent pre-orbital lobe. Merus of external maxilliped with border entire or slightly V-shaped in both sexes.

Discussion.—The morphological characters of these specimens coincide in general terms with the description of *Eupleurodon peruvianus* (Rathbun). Nevertheless, they differ from it, particularly the male, in which the sulcus that separates the hepatic and branchial regions is tiny, and the interorbital sulcus is not very acute. The left hepatic lobe is fractured, so it is not possible to see if this sector is curved. The branchial lobe is slightly smaller than the hepatic lobe and its sides are lightly concave. The rostrum is remarkably bifurcate, thick, and provided with 2 lobes at the tip; it is longer than broad, with parallel sides in the proximal ⅔. The fingers of the chelae fit well although they will not close completely. The upper side of the merus of the first and the second ambulatory legs is not laminated as it appears in Garth's (1958) description; it is difficult to see the 2 or 3 teeth described. On the other hand, the female shows variations in the merus of the maxillipeds which when closed are slightly V-shaped at the anterior and internal angle; on the chelae the propodal finger is not strongly twisted, and the dactylus has a large basal tooth situated nearly at the midlength of its cutting border. The observed morphological variations are generally differences in growth stage rather than shape. The ovigerous females have about 700 eggs, those of MNHN D-10859 in an early stage of development, without ocular spots; MNHN D-10860 has eggs with ocular spots.

The specimens of *Eupleurodon peruvianus* from samples of *Corallina officinalis chilensis* were collected together with specimens of another majid, *Acanthonyx*

petiveri H. Milne Edwards; the two specimens found by Fuentes (1978) in the stomach contents of *Pimelometopon maculatus* indicate that *E. peruvianus* is only an occasional prey item in the diet of this third level carnivorous fish within the food chain of the upper sublittoral.

The present finding of the rarely collected *Eupleurodon peruvianus* constitutes a new record of this genus and species for the carcinological fauna of Chile (Retamal 1981), and an extension of its known latitudinal distribution from Salinas, Ecuador, to Iquique, Chile. Sixteen species of Majidae are now known from Chile.

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